DETAILED ACTION

This non-final rejection is in response to Applicant's request for continued examination

filed on 9/16/2011. Applicant amends claims 1, 3, 15, 18, 37, and 45, previously cancelled

claims 2, 5, 6, 8-14, 16, 17, 21-36, 38, and 42-44, and adds claims 46-49. Accordingly,

Applicant presents claims 1, 3, 4, 7, 15, 18-20, 37, 39-41, and 45-49 for further examination.

I.   CONTINUED EXAMINATION UNDER 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 9/16/2011 has been entered.

II.   INFORMATION DISCLOSURE STATEMENT

The examiner has considered the information disclosure statement filed on 11/1/2011.

III. RESPONSE TO ARGUMENTS

A.   **Applicant's arguments with respect to claims 1, 3, 4, 7, 15, 18-20, 37, 39-41,
      and 45 are not persuasive because *Hughes* and *Yeager* teach different
      mailboxes associated with different recipients.**

Applicant argues that *Hughes*, *Yeager*, and *Graham* do not disclose retrieving a message

from a first mailbox, computing a message tag, then comparing message tags to messages from a

second mailbox wherein the second mailbox is associated with a different electronic mail

recipient than the first mailbox. The previous action relied on both *Hughes* and *Yeager* to teach

this particular feature.

As to the comparison feature, the rejection cited *Hughes* at Fig. 10, item 1002 for

retrieving a message and column 19, lines 17-27 for comparing messages tags. *Hughes* however

did not expressly state that the message tags are computed from messages retrieved from

different mailboxes.

To resolve this deficiency, the rejection then recited *Yeager* at column 7, line 66 to

column 8, line 1 which discloses multiple user folders (i.e., mailbox) for different users. In

reading *Yeager*, it would have been obvious to one of ordinary skill in the art that the messages

retrieved in *Hughes* could be retrieved from different mailboxes of different users. In other

words, *Hughes* discloses retrieving messages and computing tags from the messages. *Yeager*

discloses that messages can be retrieved from multiple user folders (i.e., mailboxes). Thus

combination therefore reads on the claim limitation as claimed.

The examiner further notes that these citations were set forth in the previous action.

However, beside a general allegation that the references fail to disclose the limitations,

Applicant's current argument does not specifically address the citations or the argument.

Therefore, the rejection is maintained for at least this reason as well.

> **B.   The combination of *Hughes* and *Graham* discloses the limitations of claims
> 46-49.**

Claim 46 recites subsequent to computing the first and second message tags (by

concatenating the sender ID and message submission time), replacing the first and second

message tags respectively with results of applying a hash algorithm to the first and second

resulting string.

This limitation does not overcome *Hughes* and *Graham* for the following reasons. The
rejection relied on the combination of *Hughes* and *Graham* to disclose concatenating a message
sender ID and a message submission time [*Hughes*, column 10 «lines 30-35» I column 11 «lines
16-20» I Figure 2 where : *Hughes* hashes a "message set" where the message set includes the
"current time" and sender ID. *Hughes* describes the "current time" as "the time that the message
was sent by the sender" & *Graham*, 0218: disclosing hashing a concatenation of a time-stamp
and source identifier (i.e., message sender) of a message].

Graham at paragraph 218 further discloses hashing concatenation of time-stamp and
source identifier of a message. *Hughes* then discloses replacing the message ID with the results
of hash [abstract]. For the foregoing reasons, *Graham* and *Hughes* discloses the new limitations
as claimed.

IV.   CLAIM REJECTIONS - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth
> in section 102 of this title, if the differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at the time the invention was made
> to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

A.   Priority date for the concatenating and hashing feature

The independent claims contain a limitation reciting concatenating a message sender and
a message sender submission time into a string and applying a hash algorithm to that first string.
This feature does not seem to be described or supported in Applicant's provisional applications

60/268,092 or 60/347,238. Thus, for the purposes of this rejection, this feature has the priority

date of February 12, 2002 which is the filing date of Applicant's application.

If Applicant disagrees with this assessment, Applicant should cite the specific pages in

either application which provide written description consistent with § 112, 1st paragraph of the

concatenating and hashing feature.

> B.   Claims 1, 3, 7, 15, 18, 20, 37, 39, 41, and 45 are rejected under 35 U.S.C.
> §103(a) as being unpatentable over *Hughes*, U.S. Patent No. 6.122.372, in
> view of *Yeager*, U.S. Patent No. 6.167.402, in further view of *Graham* et al.,
> U.S. Patent Publication No. 2002|0178271 ["*Graham*"].

Applicant should note that all citations are to *Hughes* unless otherwise noted.

Claims 1, 15, 37, 41, and 45

As to claim 1, *Hughes* as modified by *Yeager* and *Graham* discloses a method for

identifying a unique electronic mail message in a plurality of electronic mail messages extracted

from an electronic mail messaging system, the method comprising:

retrieving from a first mailbox on the electronic mail messaging system a copy of a

message [*Yeager*, column 2 «lines 49-62» : teaching the well known feature of retrieving

messages from a user's inbox];

computing a first message tag by concatenating a message sender of the first message and

a message sender submission time of the first message into a first resulting string [column 10

«lines 30-35» | column 11 «lines 16-20» | Figure 2 where : *Hughes* hashes a "message set" where

the message set includes the "current time" and sender ID. *Hughes* describes the "current time"

as "the time that the message was sent by the sender" & *Graham*, 0218: disclosing hashing a

concatenation of a time-stamp and source identifier (i.e., message sender) of a message];

storing the first message in a message archive [column 13 «lines 58-59»: storing the message in a database];

storing the first message tag in a single shared index file [column 1 «lines 20-21»: the message ID is generated as a hash function | column 13 «lines 56-57»: storing the message ID in the database | column 3 «lines 23-30» | column 19 «lines 17-27»: *Hughes* implies an index file through his teaching of searching for a match in the database];

retrieving from a second mailbox on the electronic mail messaging system a second message, wherein the second mailbox is associated with a different electronic mail recipient than the first mailbox [*Yeager*, column 2 «lines 49-62» : teaching the well known feature of retrieving messages from a user's inbox | column 7 «line 66» to column 8 «line 1»: disclosing multiple user folders (i.e., mailbox) for different users & *Hughes*, Fig. 10 «item 1002»: retrieving a message];

computing a second message tag concatenating a message sender of the second message and a message sender submission time of the second message into a second resulting string [*Hughes*, column 10 «lines 30-35» | column 11 «lines 16-20» | Figure 2 where: *Hughes* hashes a "message set" where the message set includes the "current time" and sender ID. *Hughes* describes the "current time" as "the time that the message was sent by the sender & *Graham*, 0218: disclosing hashing a concatenation of a time-stamp and source identifier (i.e., message sender) of a message]; and

reviewing a list of message tags including the first message tag stored in the single shared index file [column 19 «lines 21-23»: reviewing the database of message IDs], wherein:

in the event the second message tag matches the first message tag, determining the

second message is a duplicate of the first message already stored in the message archive [column

19 «lines 17-27»];

in the event the second message tag does not match any of the list of message tags

including the first message tag, determining the second message is not a duplicate message

already stored in the message archive and subsequently:

storing the message tag in the message archive [column 19 «lines 37-47»]; and

storing the second message tag in a single shared index file [column 19 «lines 37-

47»].

As indicated by the foregoing mapping, *Hughes* does not expressly disclose (1) retrieving

a first and second message from a first and second mailbox, respectively, wherein the second

mailbox is associated with a different electronic mail recipient than the first mailbox; and (2)

concatenating the message sender and a message submission time. However, both of these

features were well known in the art at the time of Applicant's invention as evidenced by *Yeager*

and *Graham*.

1.   *Yeager* discloses retrieving a first and second message from a first and
      second mailbox, respectively, wherein the second mailbox is associated
      with a different electronic mail recipient than the first mailbox.

Yeager teaches the first feature in an invention directed towards a message store that

contains an index file [abstract]. Like *Hughes*, *Yeager* discloses hashing email messages in order

to prevent storing duplicate copies within a message store [column 10 «lines 5-7»]. Unlike

Hughes, *Yeager* discloses (1) retrieving from a mailbox on the electronic mail messaging system

a copy of the message [column 2 «lines 49-62» : teaching the well known feature of retrieving

messages from a user's inbox] and (2) that the messages are retrieved from a plurality of

mailboxes associated with multiple electronic mail recipients [column 2 «lines 49-62» | column 7

«lines 7-11»].

Despite not expressly teaching a plurality of mailboxes, this feature is implied by the fact

that there are multiple mail recipients. It would have been obvious to one ordinary skill in the art

to have reasonably inferred the presence of multiple inboxes (and therefore retrieval from them)

when there are multiple recipients. It would have been further obvious to one of ordinary skill in

the art to have modified *Hughes* invention with *Yeager*'s teachings retrieving and storing email

messages. Given *Hughes* teaching that his invention is compatible with emails [column 8 «lines

43-44»], one would have been motivated to adapt *Hughes* message store to be compatible with

email systems to increase the store's functionality and usefulness.

   2.   *Graham* discloses hashing a concatenation of a message time-stamp and
        message source identifier.

While *Hughes* discloses computing a message tag by using a message sender and

message submission time, *Hughes* does not expressly disclose concatenating these two

properties. However, *Graham* discloses concatenating a message time stamp (i.e., submission

time) and a message source identifier where *Graham* describes this as a user identifier (i.e.,

message sender) [*Graham*, Fig. 6B describing Source ID as a user identifier | 0218].

Applying *Graham*'s teaching to *Hughes* would result in the concatenation of *Hughes*'

sender ID [Fig. 2 «item 214»] (i.e., *Graham*'s source ID) and *Hughes*' time [Fig. 2 «item 207»]

(i.e., *Graham*'s timestamp). This combination reads on the claimed limitation.

It would have been obvious to one of ordinary skill in the art to have modified *Hughes* to

include *Graham*'s teachings of hashing a concatenation of a message's source ID and timestamp.

Such a modification to *Hughes'* system is an example of simple substitution of one known

element (*Hughes'* hashing of message properties) for another (*Graham*'s specific teaching of

hashing a concatenation of a message's source ID and timestamp) to obtain predictable results

(*Hughes'* invention modified to create a message ID by hashing the concatenation of the sender

ID and time stamp). *See* MPEP § 2143.

As to claims 15, 37, 41, and 45, they are rejected for at least the same reasons set forth

for claim 1.

Claims 3, 18, and 39

As to claim 3, *Hughes* as modified by *Yeager* and *Graham* discloses applying a hash

algorithm to the message tag forms a uniform string wherein the uniform string, wherein the

uniform string has a predetermined length [column 10 «lines 30-35» | column 11 «lines 16-20» |

Figure 2]. As to claims 18 and 39, they are rejected for at least the same reasons set forth for

claim 3.

Claims 7 and 20

As to claim 7, *Hughes* as modified by *Yeager* and *Graham* discloses the index file is

stored in a relationship database system [column 3 «lines 23-30» | column 19 «lines 17-27»]. As

to claim 20, it is rejected for at least the same reasons set forth for claim 7.

Claims 46-49

Hughes as modified by *Yeager* and *Graham* discloses:

subsequent to computing the first message tag [*Graham*, 0218: disclosing concatenating

(then hashing) the message time-stamp and source ID (i.e., sender), replacing the first message

tag with results of applying a hash algorithm to the first resulting string [*Hughes*, abstract:

disclosing that the message ID is replaced with the results of a hashing of the message body and

identification information (i.e., in view of *Graham*, this information includes concatenation of

time stamped and source ID)]; and

subsequent to computing the second message tag, replacing the second message tag with

results of applying the hash algorithm to the second resulting string [see citations above to

Graham and *Hughes* | *Yeager*, column 7 «line 66» to column 8 «line 1»: disclosing multiple user

folders (i.e., mailbox) for different users].

C.   **Claims 4, 19, and 40 are rejected under 35 U.S.C. §103(a) as being
      unpatentable over *Hughes*, in view of *Yeager* and *Graham*, in further view of
      Mattis et al, U.S. Patent No. 6.292.880 ["*Mattis*"].**

As to claim 4, while *Hughes* as modified by *Yeager*, *Graham*, and Mattis teaches hashing

message properties, *Hughes* does not expressly disclose utilizing MD5 as the hash algorithm.

However, implementing MD5 as a hash algorithm with respect to messages was well known in

the art at the time of Applicant's invention.

Mattis expressly discloses hashing message tags using the MD5 algorithm to form a

uniform string [*Mattis*, column 9 «lines 48-63»]. It would have been obvious to one of ordinary

skill in the art to have implemented *Hughes* hashing algorithm as an MD5 algorithm. The MD5

hashing algorithm was well known in the art at the time of *Hughes* invention.

As to claims 19 and 40, they are rejected for at least the same reasons set forth for claim

4.

VI.   CONCLUSION

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-

3942. The examiner can normally be reached on Monday to Friday [10 am - 6 pm].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thu Nguyen can be reached on (571)272-6967. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOHM CHANKONG/
Primary Examiner, Art Unit 2452